

REMARKS/ARGUMENTS

After the foregoing amendment, claims 1-14 and 24 are currently pending in this application. Claims 15-23 and 25 have been canceled without prejudice. Claim 24 has been amended to incorporate the subject matter of claim 25, to more distinctly point out subject matter that the Applicants regard as the invention. Applicants submit that no new matter has been introduced into the application by these amendments.

Claim Rejections - 35 USC §102(e)

Claim 24

Claim 24 stands rejected under 35 USC §102(e) as being anticipated by Willars, US Patent No. 6,597,679 (hereinafter "Willars").

Amended claim 24 recites the steps of using the measurements, determining whether soft/softer handover should be performed using a soft/softer handover threshold test; if the soft/softer threshold is exceeded, calculating a cell loading/congestion and a soft/softer handover metric; evaluate the cell loading/congestion metric and the soft/softer handover metric to determine if a soft/softer handover should be performed; and if the determination is not to perform soft/softer handover, using the measurements, determining whether hard handover should be performed using a hard handover threshold test. Willars does not

disclose a soft/softer handover metric or a cell loading/congestion metric. Therefore, because Willars does not disclose all of the elements of claim 24, claim 24 is not anticipated by Willars.

Claim Rejections – 35 USC §103(a)

Claims 1-23 stand rejected under 35 USC §103(a) as being unpatentable over US Patent Application Publication No. 2003/0083069 to Vadgama (hereinafter "Vadgama") in view of Bottomley, US Patent No. 6,473,602 (hereinafter "Bottomley").

Claims 1, 6 and 15

Amended independent claim 1 recites the step of synchronizing the handover cell/sector and current cell/sector so their time slots are time synchronized. Vadgama discloses a list of active base stations which are involved in the soft handover operation (paragraph 0077). Each channel is transmitted by spreading the channel over a wide spectrum using a unique spreading code, and that CDMA may be used in combination with time division multiplexing (paragraph 0073). However, Vadgama does not disclose determining currently used uplink and downlink timeslots in a current cell/sector, nor assigning uplink and downlink timeslots for a handover cell/sector that are different timeslots than the currently

used uplink and downlink timeslots. Vadgama does not teach the step of synchronizing the handover cell/sector and current cell/sector so their time slots are time synchronized.

Bottomley discloses control mechanisms for handing off a call from one base station to another using information obtained from channel energy or power measurements made at the base stations (column 1, lines 45-53). Bottomley also discloses measurements made at the user equipment that are communicated back to the base station, where idle timeslots are available for making these mobile assisted handoffs (column 1, line 65- column 2, line 13). However, Bottomley does not disclose synchronizing the handover cell/sector and current cell/sector so their time slots are time synchronized as recited in claim 1 of the present application. For the reasons stated above, Vadgama taken alone or in combination with Bottomley do not disclose all the limitations of claim 1. Therefore claim 1 is allowable over Vadgama in view of Bottomley.

Amended independent claim 6 recites a synchronizer for synchronizing the handover cell/sector and current cell/sector so their time slots are time synchronized. For the same reasons presented above, claim 6 is allowable over Vadgama in view of Bottomley.

Claims 2 - 5 and 7 - 14

Claims 2 - 5 and 7 - 14 depend from allowable independent claims 1 and 6, respectively and are allowable for the reasons stated above.

Claim 24

Canceled claim 25 stands rejected under 35 USC §103(a) as being unpatentable over Willars in view of US Patent Application Publication No. 2003/0083069 to Vadgama (hereinafter "Vadgama"). The subject matter of claim 25 has been incorporated into amended independent claim 24 which recites the steps of: if the soft/softer threshold is exceeded, calculating a cell loading/congestion and a soft/softer handover metric; evaluating the cell loading/congestion metric and the soft/softer handover metric to determine if a soft/softer handover should be performed.

Vadgama discloses that whenever the difference in signal qualities between two cells is below a certain threshold, the mobile unit selects the cell with the lowest congestion (paragraph 0083). Therefore, Vadgama will always choose the lightest loaded or least congested cell. The soft/softer handover metric of claim 24 computes the gain that will be accomplished by performing a soft/softer handover. Vadgama does not disclose a soft/softer handover metric, nor a soft/softer handover metric and a cell loading/congestion metric to determine if a soft/softer handover should be

performed. Therefore, amended claim 24 is allowable over Willars and Vadgama either alone or in combination.

Based on the arguments presented above, withdrawal of the 35 USC §103(a) rejection of claims 1 – 14 and 24 is respectfully requested.

Conclusion

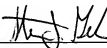
If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

Applicant: Cave et al.
Application No.: 10/748,775

In view of the foregoing amendment remarks, Applicants respectfully submit that the present application, including claims 1-14 and 24, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

Cave et al.

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